

## **II. Remarks**

### **A. Amendment of Claims**

The Office has withdrawn claims 1-11 pursuant to their being drawn to non-elected species. *See* Office Action, page 2. Accordingly, Applicant hereby cancels claims 1-11 without prejudice or disclaimer. Additionally, Applicant hereby cancels claim 16 in light of amendments to claim 12.

Claim 12 is hereby amended for clarity. Support for the amendments exists throughout the specification (for example, in paragraphs [0001] and [0046]) and no new matter has been added.

### **B. Claim Rejections 35 USC §101**

The Office has rejected claims 12-20 under 35 USC §101 as being directed to non-statutory subject matter. *See* Office Action, page 2. The amendments to independent claim 12 include recitations for applying the calculated transition zone to a cornea. Moreover, amended claim 12 is directed to a method that produces a useful, concrete and tangible result, and such a §101 rejection is improper. *See* MPEP §2106 (IV). Thus, Applicants respectfully request removal of the rejection with respect to amended independent claim 12 and dependent claims 13-20.

### **C. Claim Rejections 35 USC §102(b)**

The Office has rejected claims 12-20 under 35 USC §102(b) as being anticipated by US 6,547,393 ("Ruiz"). *See* Office Action, page 3. Applicants respectfully disagree and assert that since Ruiz fails to teach every element of independent claim 12, no anticipation exist with respect to claim 12 and dependent claims 13-20.

Amended claim 12 recites the element, "calculating a customized transition zone pattern which addresses curvature discontinuity by eliminating its occurrence in and/or near the programmed optical zone." Nowhere in Ruiz is there any discussion of calculating a

continuously curved transition zone pattern. Additionally, there is no teaching, suggestion, or motivation to perform this step in the methods disclosed by Ruiz.

Amended claim 12 further recites that calculation of the customized transition zone pattern "involves use of a curve fitting algorithm to generate a transition zone with a continuous second derivative along a profile of the cornea outwardly from the programmed optical zone correction." Nowhere in Ruiz is there any discussion of using a curve fitting algorithm to generate such a transition zone. Also, Ruiz lacks any teaching, suggestion, or motivation to use a curve fitting algorithm for such purposes.

Additionally, amended claim 12 recites the element of "applying the customized transition zone pattern to an ablation zone pattern to provide an updated ablation zone pattern, wherein corrective properties of the continuously curved transition zone pattern are included in the updated pattern to facilitate an increased functional optical zone." Nowhere in Ruiz is there any discussion of increasing the functional optical zone by including in an ablation zone pattern a continuously curved transition zone pattern. In addition, there is no teaching suggestion or motivation in the methods disclosed by Ruiz to perform this step.

Furthermore, amended claim 12 recites the element of "performing an ablation on the cornea based on the updated ablation zone pattern." Nowhere in Ruiz is there any discussion of performing an ablation using a pattern comprising a continuously curved transition zone. Likewise, Ruiz lacks any teaching, suggestion, or motivation to perform an ablation using such a pattern.

MPEP § 2131 explains that a claim is anticipated only if a prior art reference teaches each and every element as set forth in the claim. Since Ruiz lacks disclosure of all of the elements of Applicants' claims as described above, Ruiz cannot anticipate the claims. Accordingly, Applicants respectfully request removal of the rejection with respect to amended independent claim 12, as well dependent claims 13-20, and notice of allowance of the claims be provided.

**D. Conclusion**

For the reasons given herein, Applicants submit that amended independent claim 12 and dependent claims 13-20 are in condition for allowance and respectfully request prompt notice thereof. It is believed that no fees are necessary in connection with the filing of this paper. However, if the Commissioner determines that fees are necessary, or if a petition is required for acceptance of the same, the Commissioner is hereby authorized to charge Deposit Account No 041133 for any such fees, and Applicants hereby make any such petition.

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